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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,004	01/28/2000	Daniel Yellin	P-1592-US1	1644

27130 7590 04/22/2004

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EXAMINER

CHUNG, PHUNG M

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 04/22/2004

21

Please find below and/or attached an Office communication concerning this application or proceeding.

PR24

Office Action Summary	Application No.	Applicant(s)	
	09/493,004	YELLIN, DANIEL	
	Examiner	Art Unit	
	Phung My Chung	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-14,21-25 and 28-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-25 is/are allowed.
- 6) ☒ Claim(s) 1-3,5-14,21 and 28-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-13, and 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claimed invention is not directed to either functional nor non functional descriptive material per se. Nor is a natural phenomena being claimed.

The claimed invention is not directed to a series of steps to be performed on a computer. The claimed invention does not have any limitation directed to pre- or post-computer process activity. The claimed invention merely recites a series of mathematical operations or calculations (i.e. mathematical algorithms) by reciting the following steps of :

(a) detecting ...; and

(b) determining

The claimed invention is directed merely to the abstract idea of detecting the channel fading characteristic based on mathematical manipulations and merely outputting the result therefrom. Therefore, the claimed invention is directed merely to an abstract idea or solves a purely mathematical problem which has not been applied to a practical application within the technological arts.

3. Claims 1-3, 5-14, 18, 21 and 28-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, line 5, "a quantization correction command" is vague and indefinite. What is meant by quantization correction command?

As per claim 2, lines 2-3, "quantizing...to produce a quantized signal" it is not clear how by quantizing the segment according to the quantization correction command the quantize signal is produced?

As per claim 6, lines 7-8, "a quantization correction command" is vague and indefinite; and

Line 7, "quantizing at least one segment of said signal ..." the interconnection and/or interrelation to the previous step is unknown.

As per claim 14, line 8, "a correction command" is vague and indefinite. What is meant by a correction command?

As per claim 18, "a correction command" is vague and indefinite. What is meant by a correction command?

As per claim 28, lines 2-4, "quantizing at least one segment of a signal received...of said channel" it is unclear how it is quantizing the at least one segment according to a quantization correction command? and

line 3, "a quantization correction command" is vague and indefinite. What is meant by a quantization correction command?

As per claim 29, lines 4-6, "a quantizer ...said fading characteristics" It is unclear how the quantizer quantizing at least one segment of a received signal according to a quantization correction command? And

Line 5, "a quantization correction command" is vague and indefinite. What is meant by a quantization correction command?

As per claim 31, lines 2-3, "a quantizer...correction command" it is unclear how the quantizer quantizing at least one segment of the received signal according to a quantization correction command? And

Line 3, "a quantization correction command" is vague and indefinite. What is meant by a quantization correction command?

As per claims 3, 5, 8-13, 21, 30 and 32, these claims are also rejected because they dependent upon the rejected base claims.


4. Claims 22-25 are allowable.

Applicant's arguments with respect to claims 1-2 and 28-29 have been considered but are moot in view of the new ground(s) of rejection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung My Chung whose telephone number is 703-305-9686. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PHUNG M. CHUNG
PRIMARY EXAMINER